


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>	
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Thurston 15-27-9-24	
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT BONANZA	
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME	
6. NAME OF OPERATOR THURSTON ENERGY OPERATING						7. OPERATOR PHONE 214 704-3896	
8. ADDRESS OF OPERATOR 365 W. 50 N. Ste W-8, Vernal, UT, 84078						9. OPERATOR E-MAIL rcurton@thurstonenergy.com	
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) SL-0717250 C			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')	
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')	
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>	
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN	
LOCATION AT SURFACE	683 FSL 1797 FEL	SWSE	27	9.0 S	24.0 E	S	
Top of Uppermost Producing Zone	683 FSL 1797 FEL	SWSE	27	9.0 S	24.0 E	S	
At Total Depth	683 FSL 1797 FEL	SWSE	27	9.0 S	24.0 E	S	
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 683		23. NUMBER OF ACRES IN DRILLING UNIT 400		
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1100		26. PROPOSED DEPTH MD: 8000 TVD: 8000		
27. ELEVATION - GROUND LEVEL 5638			28. BOND NUMBER UTB-000181		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE White River Permit #49-2286		
ATTACHMENTS							
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES							
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER				<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN			
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)				<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER			
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)				<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP			
NAME Russell H. Cox			TITLE Operations Manager			PHONE 435 789-8580	
SIGNATURE			DATE 10/22/2010			EMAIL russell.cox@thurstonenergy.com	
API NUMBER ASSIGNED 43047513280000			APPROVAL <div style="text-align: center;">  Permit Manager </div>				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	5.5	0	8000		
Pipe	Grade	Length	Weight			
	Grade N-80 LT&C	8000	36.0			

CONFIDENTIAL

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	2000		
Pipe	Grade	Length	Weight			
	Grade J-55 ST&C	2000	36.0			

CONFIDENTIAL

Ten Point Plan

Thurston Energy Operating Company

Thurston 15-27-9-24

Surface Location SW $\frac{1}{4}$ SE $\frac{1}{4}$

Section 27, T.9S. R24E.

CONFIDENTIAL

1. Surface Formation

Green River

2. Estimated Formation Tops and Datum:

<u>Formation</u>		<u>Depth</u>	<u>Datum</u>
Green River		Surface	+5,638' G.L.
Bird's Nest	Water	1,600	+4,038'
Wasatch	Oil/Gas	3,888	+1,750'
Mesaverda	Oil/Gas	6,088	-450'
TD		8,000	-2,362

A 12 ¼ " hole will be drilled to 2,000' +/- . The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest. All water and oil and gas bearing zones shall be protected by casing and cement program.

3. Producing Formation Depth:

Formation objective includes the Wasatch, Mesaverde and its sub-members.

4. Proposed Casing:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/FT</u>	<u>Grade</u>	<u>Coupling & Tread</u>	<u>Casing Depth</u>	<u>New/Used</u>
12 ¼"	9 5/8"	36#	J-55	STC	2,000	New
7 7/8"	5 1/2"	17#	N-80	LTC	T.D.	New

Cement Program:

The Surface Casing will be cemented to the Surface as follows:

Note: Cement amounts shown with 50% excess.

<u>Casing Depth</u>	<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead:						
0-1,600'	9 5/8	Premium "5" 16% Gel 10 #/sk Gilsomite 3% Salt 3 #/sk GB3 0.25 #/sk Flocele	197 sks. +/-	3.82ft ³ /sk	23	11.0 ppg
Tail:						
1,600-2,000'	9 5/8	Class "G" 2% Calcium Chloride 0.25 #/sk Flocele	159 sks. +/-	1.18ft ³ /sk	5	15.6 ppg

Top Job:

9 5/8	Class "G"	10-200 sks. +/-	1.15ft ³ /sk	5	15.8 ppg
	4% Calcium Chloride				
	0.25 #/sk Flocele				

Production casing will be cemented to 1800' or higher as follows:**Note: Tail should be 200' above the Wasatch****Note: Cement amounts shown with 25% excess.**

<u>Casing Depth</u>	<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead:						
1,800-3,688'	5 1/2	Premium Lite II 0.05 #/sk Static Free 0.25 #/sk Cello Flake 5 #/sk KOL Seal 0.005 gps FP-6L 8% Gel 0.5% R-3 0.5% FL-52	128 sks. +/-	3.38ft ³ /sk	20.52	11.0 ppg
Tail:						
3,688'-8,000'	5 1/2	Class "G" 0.05% Static Free 10% NACL 0.1% R-3 2% Gel	713 sks. +/-	1.31ft ³ /sk	5.91	14.3 ppg

5. BOP and Pressure Containment Data:

A 3000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 9 5/8" surface casing. An upper Kelly cock to the required pressure rating with a handle available shall be employed.

The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling program.

6. Mud Program:

<u>Interval</u>	<u>Mud Weight (lbs./gal)</u>	<u>Viscosity (Sec./OT.)</u>	<u>Fluid Loss Ml/30 Mins.</u>	<u>Mud Type</u>
0-2000	Air/Clear Water	-----	No Control	Water/Gel
2000-T.D.	8.4-9.4	30-45	8-10	LSND

water based mud system

Note: Mud weights may exceed 9.4 due to solids increasing at or near T.D. Increased weights are not required to control formation pressure. Operator will have on location sufficient mud and weight material to increase mud weight to 9.4 at any

time while drilling the subject well. Visual mud monitoring incorporating pit level indicators shall be used.

7. Testing, Coring, Sampling and Logging:

- a) DST: None are anticipated
- b) Coring: There is the possibility of sidewall coring.
- c) Mud Sampling: Every 10' from 2000' to T.D.
- d) Logging:
- | Type | Interval |
|----------------------|-------------------|
| DLL/SFL W/GR and SP | T.D. to Surf. Csg |
| FDC/CNL W/GR and CAL | T.D. to Surf. Csg |

8. Abnormalities (including sour gas):

Based on off set wells anticipated bottom hole pressure will be less than 3000 psi. No abnormal pressures, temperatures or other hazards are anticipated. Other wells drilled in the area have not encountered over pressured zones or H2S.

9. Other facets of the proposed operation:

Off Set Well information:

Temporarily Abandon Wells:

Cartwright #2

Abandon Wells:

Dirty Devil #22-27

Dirty Devil #U22-26A

Bonanza #3

Shut in Well:

Bonanza #2D-27

10. Drilling Schedule:

The anticipated starting date is _____. Duration of operations is expected to be 30 days.

T9S, R24E, S.L.B.&M.

THURSTON ENERGY OPERATING COMPANY

WELL LOCATION, THURSTON 15-27-9-24,
LOCATED AS SHOWN IN THE SW 1/4 SE
1/4 OF SECTION 27, T9S, R24E, S.L.B.&M.
UINTAH COUNTY, UTAH.

N89°59'W - 40.11 (G.L.O.)

N89°40'W - 39.52 (G.L.O.)

N0°04'E - 40.05 (G.L.O.)

N0°03'E - 39.84 (G.L.O.)

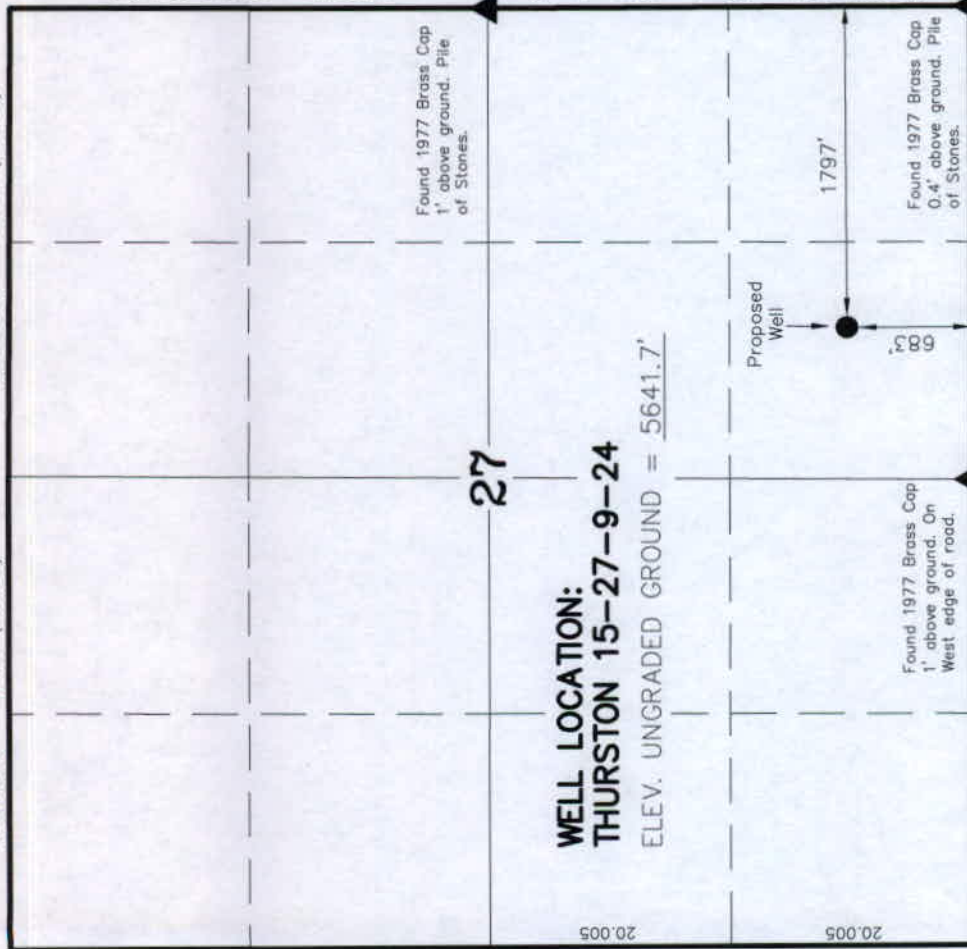
27

WELL LOCATION:
THURSTON 15-27-9-24

ELEV. UNGRADED GROUND = 5641.7'

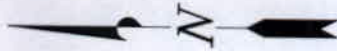
N0°02'E - 40.01 (G.L.O.)

N0°14'02"W - 2649.21' (Measured)
N0°13'W - 40.14 (G.L.O.)



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS
MADE BY ME OR UNDER MY SUPERVISION AND THAT
THE SAME ARE TRUE AND CORRECT TO THE BEST OF
MY KNOWLEDGE AND BELIEF.

JOHN R. SLAY
PROFESSIONAL LAND SURVEYOR
REGISTRATION No. 6028691
STATE OF UTAH

TIMBERLINE LAND SURVEYING, INC.
209 NORTH 300 WEST. - VERNAL, UTAH 84078
(435) 789-1365

DATE SURVEYED: 10-19-05	SURVEYED BY: K.R.K.	SHEET
DATE DRAWN: 10-29-05	DRAWN BY: J.R.S.	2
SCALE: 1" = 1000'	Date Last Revised: 08-16-10 M.W.W.	OF 11

THURSTON 15-27-9-24
(Proposed Well Head)
NAD 83 Autonomous
LATITUDE = 40° 00' 05.3"
LONGITUDE = 109° 11' 50.0"

▲ = SECTION CORNERS LOCATED
BASIS OF ELEVATION IS BENCH MARK 46 EAM LOCATED
IN THE SW 1/4 OF SECTION 23, T9S, R24E, S.L.B.&M.
THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE
BONANZA 7.5 MIN. QUADRANGLE AS BEING 5550'.

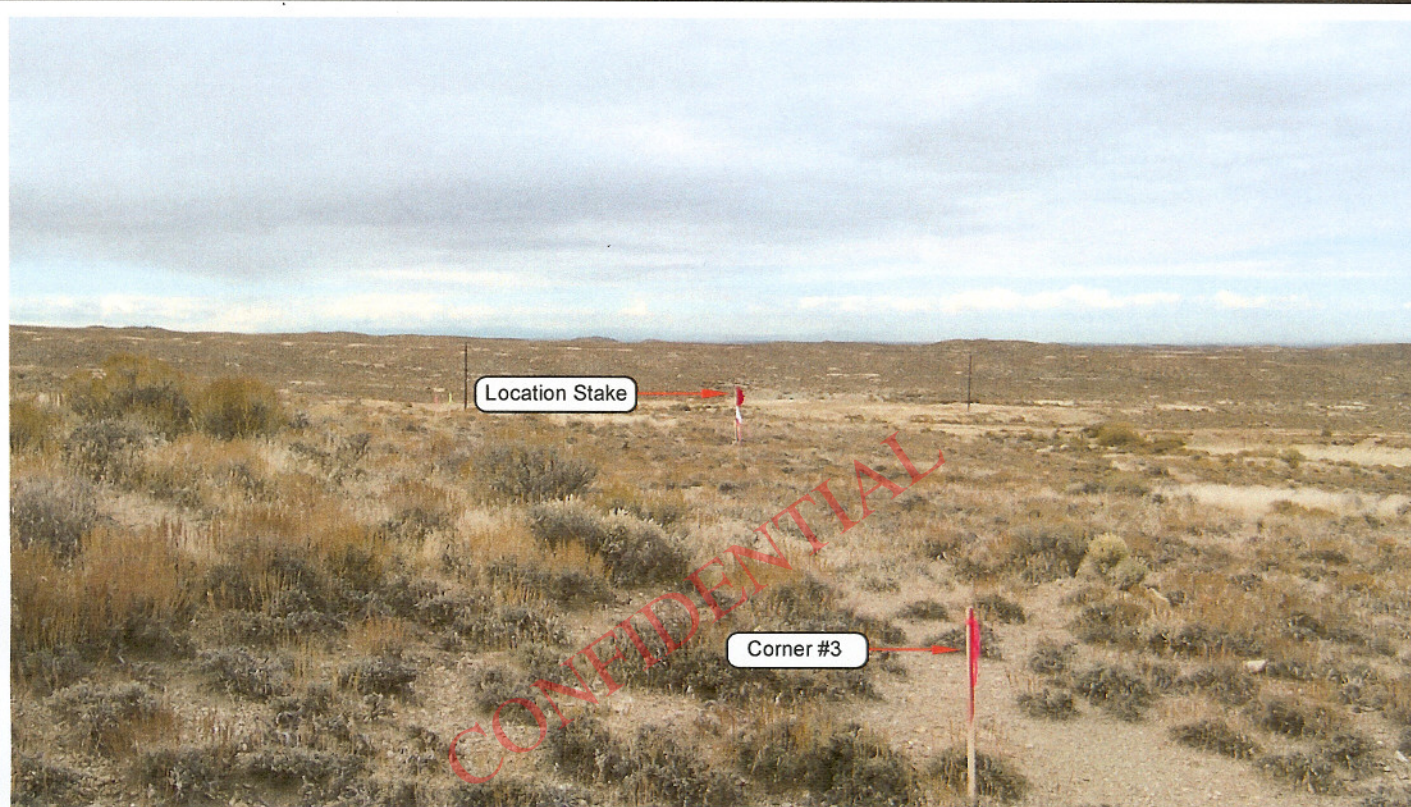


PHOTO VIEW: FROM CORNER #3 TO LOCATION STAKE

CAMERA ANGLE: WESTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: SOUTHEASTERLY

THURSTON ENERGY OPERATING COMPANY

Thurston 15-27-9-24
SECTION 27, T9S, R24E, S.L.B.&M.
683' FSL & 1797' FEL

LOCATION PHOTOS

TAKEN BY: K.R.K.

DRAWN BY: M.W.W.

DATE TAKEN: 10-19-05

DATE DRAWN: 11-02-05

REVISED: 08-16-10 M.W.W.

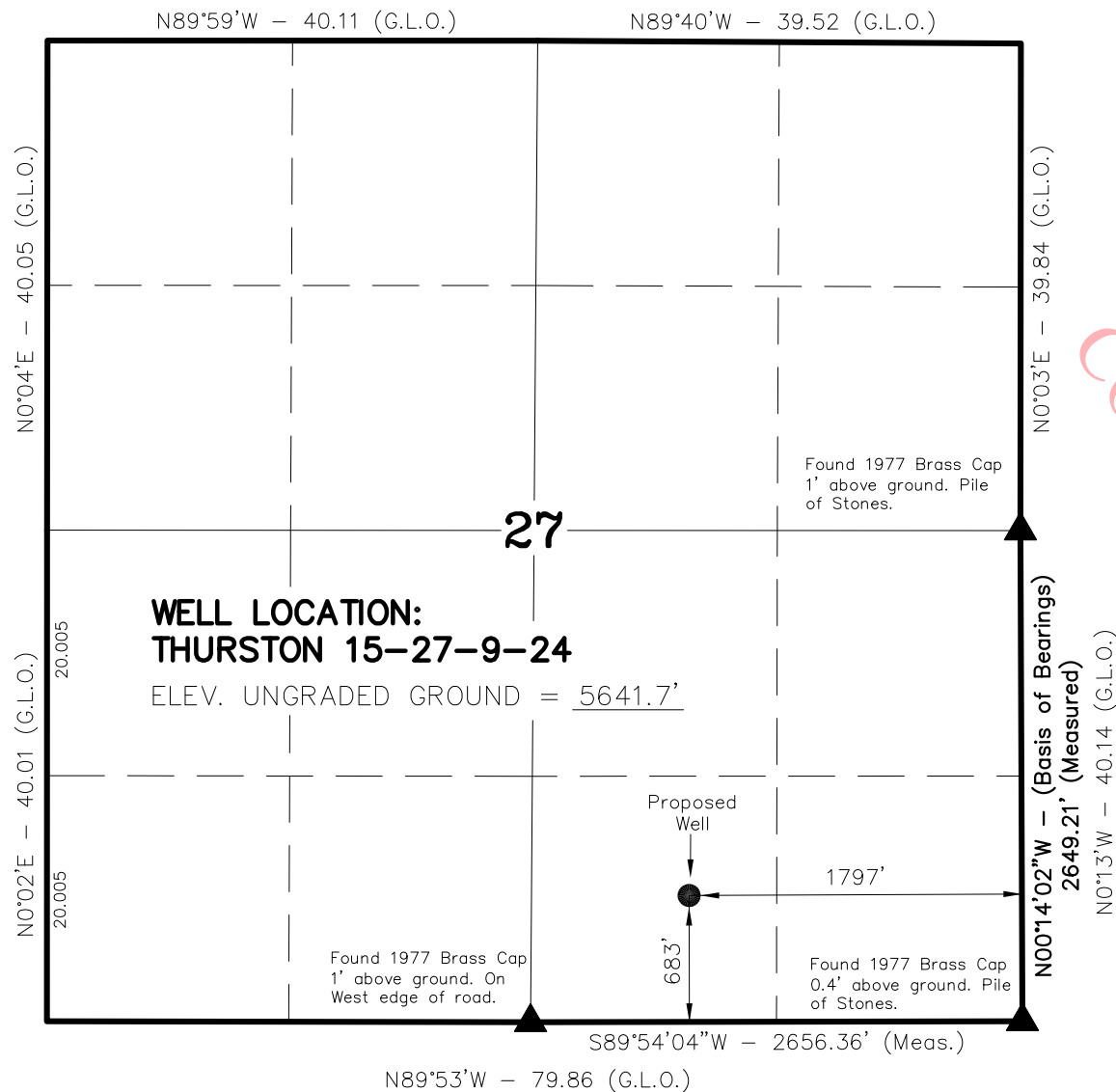
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209 North 300 West Vernal, Utah 84078
(435) 789-1365

SHEET
1
OF 11

T9S, R24E, S.L.B.&M.

THURSTON ENERGY OPERATING COMPANY

WELL LOCATION, THURSTON 15-27-9-24,
LOCATED AS SHOWN IN THE SW 1/4 SE
1/4 OF SECTION 27, T9S, R24E, S.L.B.&M.
UINTAH COUNTY, UTAH.



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

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MADE BY ME OR UNDER MY SUPERVISION AND THAT
THE SAME ARE TRUE AND CORRECT TO THE BEST OF
MY KNOWLEDGE AND BELIEF. No.6028691

EDGE AND E... No.6028691
PROFESSIONAL LAND SURVEYOR JOHN R. SLAUGHT
REGISTRATION NO. 6028691
STATE OF UTAH

▲ = SECTION CORNERS LOCATED

BASIS OF ELEVATION IS BENCH MARK 46 EAM LOCATED
IN THE SW 1/4 OF SECTION 23, T9S, R24E, S.L.B.&M.
THE ELEVATION OF THIS BENCH MARK IS SHOWN ON THE
BONANZA 7.5 MIN. QUADRANGLE AS BEING 5550'.

THURSTON 15-27-9-24
(Proposed Well Head)
NAD 83 Autonomous
 LATITUDE = 40° 00' 05.3"
 LONGITUDE = 109° 11' 50.0"

TIMBERLINE LAND SURVEYING, INC.

209 NORTH 300 WEST. - VERNAL, UTAH 84078
(435) 789-1365

DATE SURVEYED:
10-19-05

SURVEYED BY: K.R.K.

SHEET

DATE DRAWN:
10-29-05

DRAWN BY: J.R.S.

2

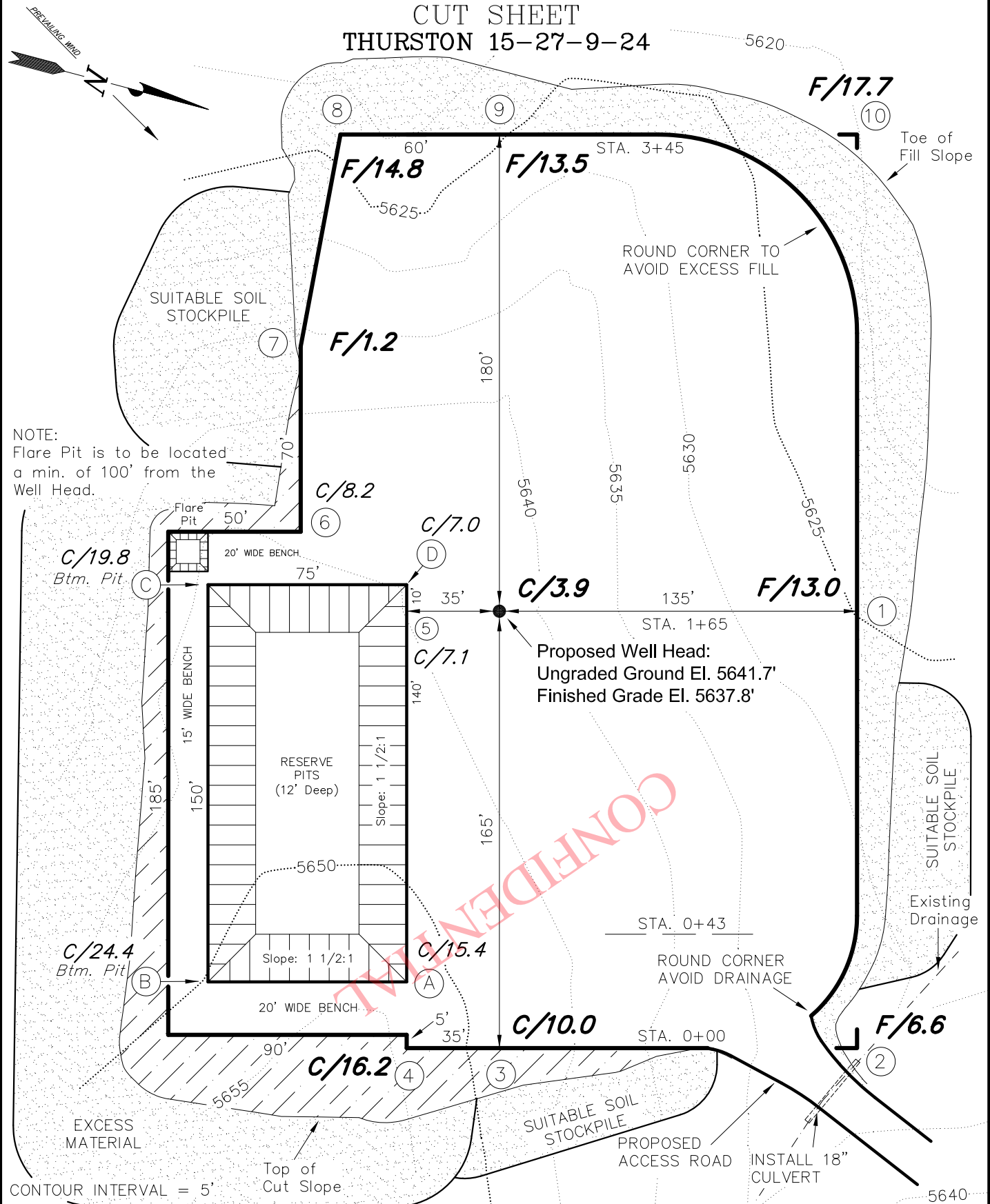
SCALE: 1" = 1000'

Date Last Revised:
08-16-10 M.W.W.

OF 11

THURSTON ENERGY OPERATING COMPANY

CUT SHEET
THURSTON 15-27-9-24

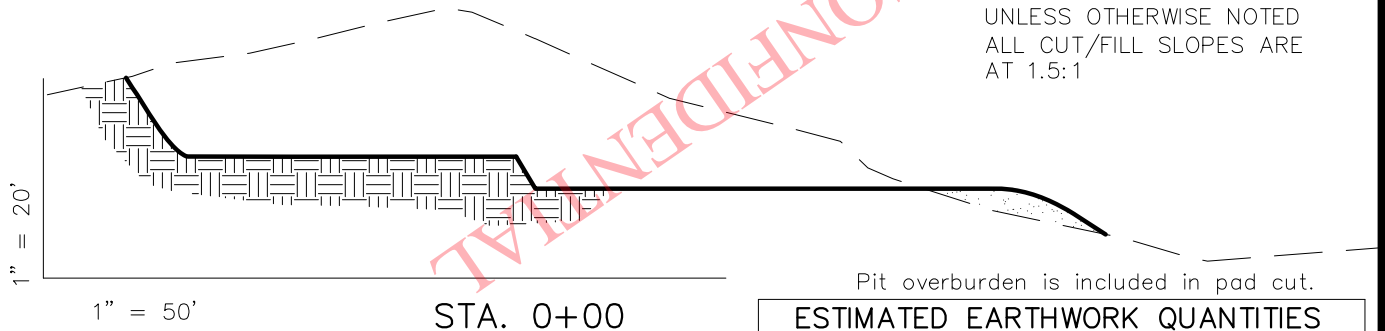
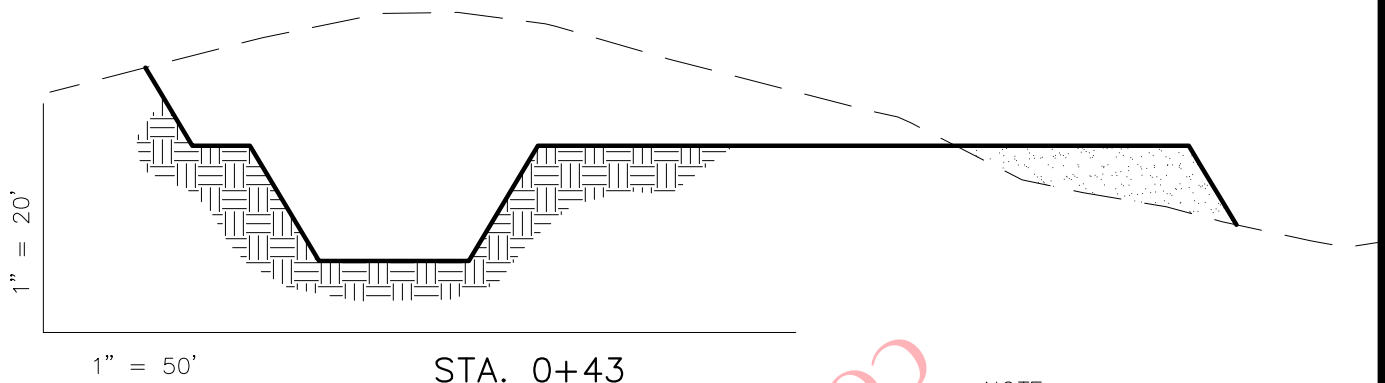
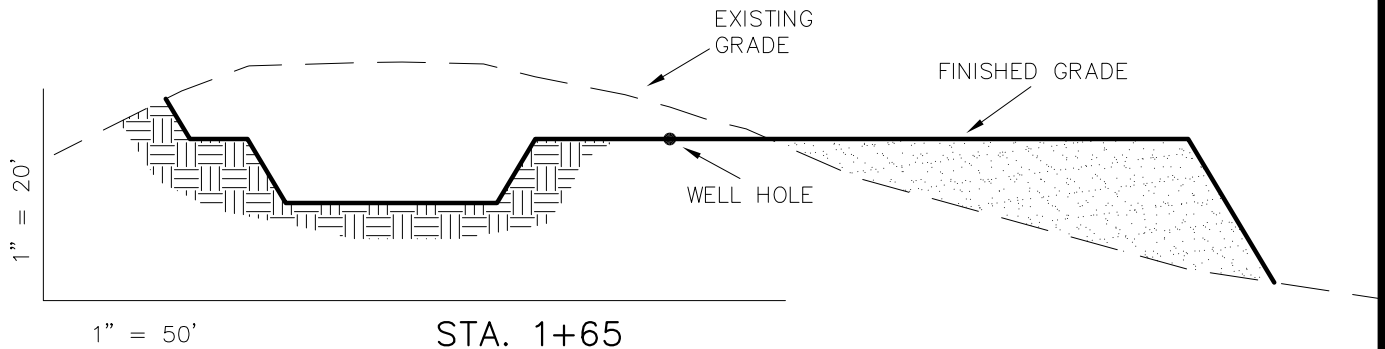
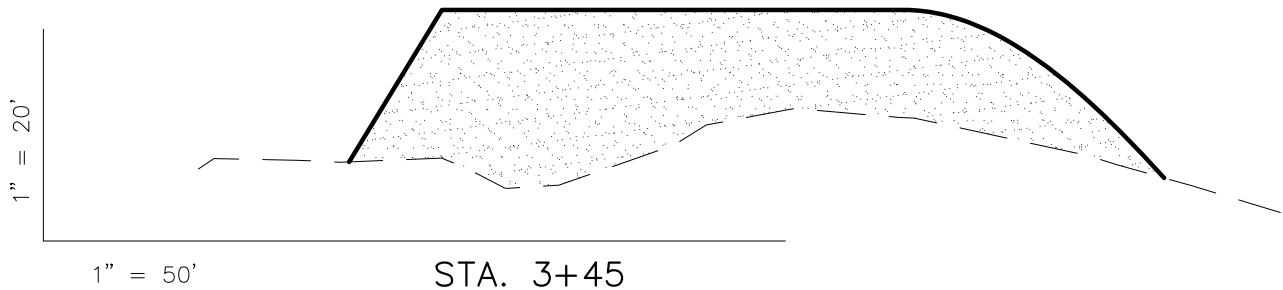


Section 27, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SE	Footage Location: 683' FSL & 1797' FEL
Date Surveyed: 10-19-05	Date Drawn: 11-2-05	Date Last Revision: 08-16-10 M.W.W.	Timberline (435) 789-1365
Surveyed By: K.R.K.	Drawn By: J.R.S.	Scale: 1" = 50'	Land Surveying, Inc. 209 NORTH 300 WEST VERNAL, UTAH 84078
			SHEET 3 OF 11

APWELLNO:43047513280000

THURSTON ENERGY OPERATING COMPANY

CROSS SECTIONS THURSTON 15-27-9-24



NOTE:
UNLESS OTHERWISE NOTED
ALL CUT/FILL SLOPES ARE
AT 1.5:1

REFERENCE POINTS

185' NORTHWESTERLY = 5621.8'
221' NORTHWESTERLY = 5621.6'
260' SOUTHWESTERLY = 5613.6'
288' SOUTHWESTERLY = 5611.9'

ESTIMATED EARTHWORK QUANTITIES (No shrink or swell adjustments have been used) (Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	12,470	14,140	Topsoil is not included in Pad Cut	-1,670
PIT	3,340	0		3,340
TOTALS	15,810	14,140	1,500	1,670

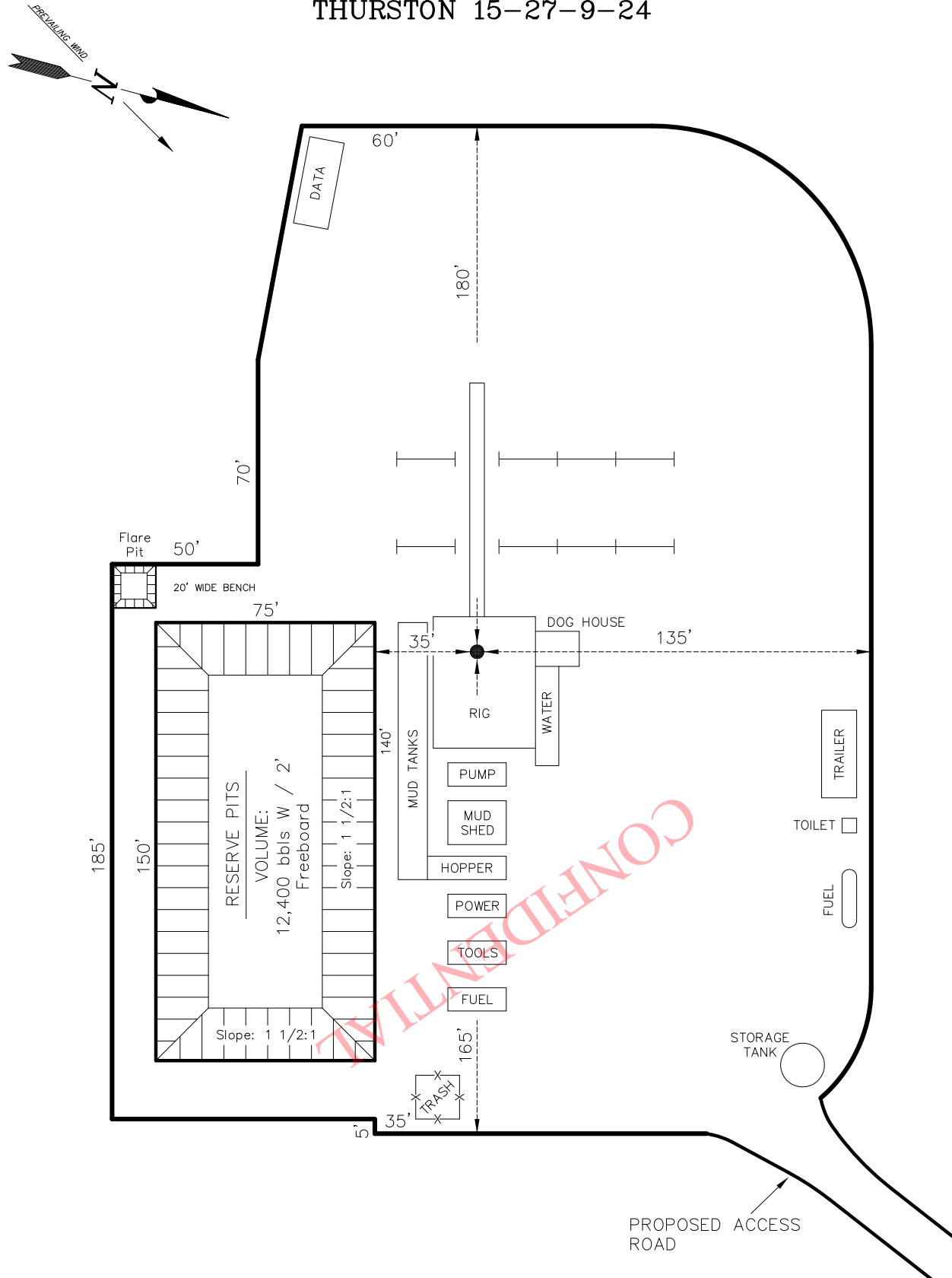
Excess Material after Pit Rehabilitation = 0 Cu. Yds.

Pit overburden is included in pad cut.

Section 27, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SE	Footage Location: 683' FSL & 1797' FEL
Date Surveyed: 10-19-05	Date Drawn: 11-2-05	Date Last Revision:	Timberline <i>Land Surveying, Inc.</i> 209 NORTH 300 WEST VERNAL, UTAH 84078 (435) 789-1365
Surveyed By: K.R.K.	Drawn By: J.R.S.	Scale: 1" = 50'	
			SHEET 4 OF 11

THURSTON ENERGY OPERATING COMPANY

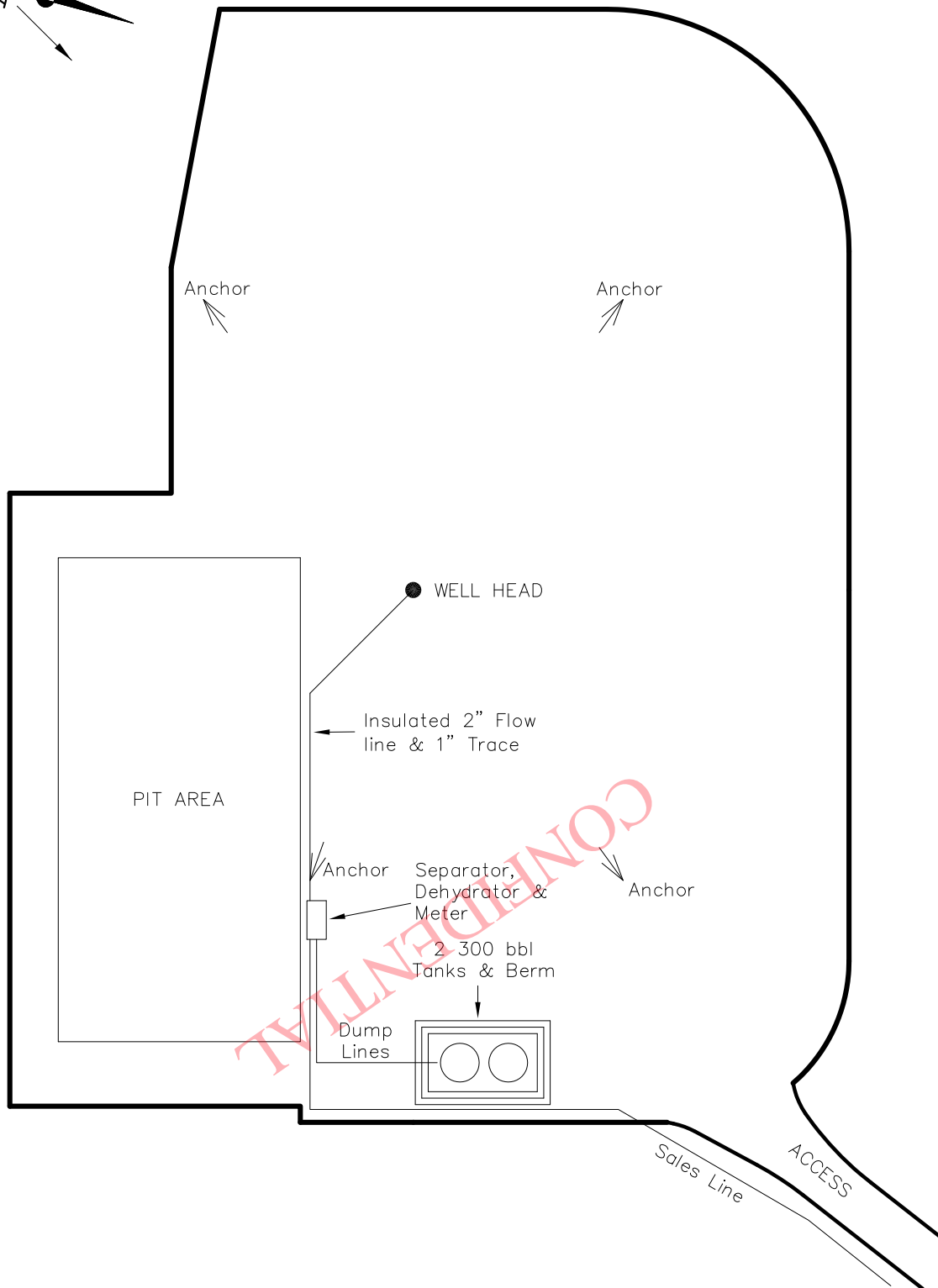
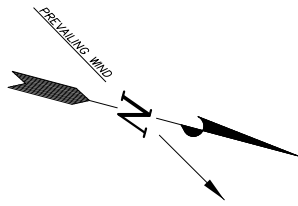
TYPICAL RIG LAYOUT THURSTON 15-27-9-24



Section 27, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SE	Footage Location: 683' FSL & 1797' FEL
Date Surveyed: 10-19-05	Date Drawn: 11-2-05	Date Last Revision: 08-16-10 M.W.W.	Timberline (435) 789-1365
Surveyed By: K.R.K.	Drawn By: J.R.S.	Scale: 1" = 50'	<i>Land Surveying, Inc.</i>
209 NORTH 300 WEST VERNAL, UTAH 84078			SHEET 5 OF 11

THURSTON ENERGY OPERATING COMPANY

PRODUCTION LAYOUT THURSTON 15-27-9-24

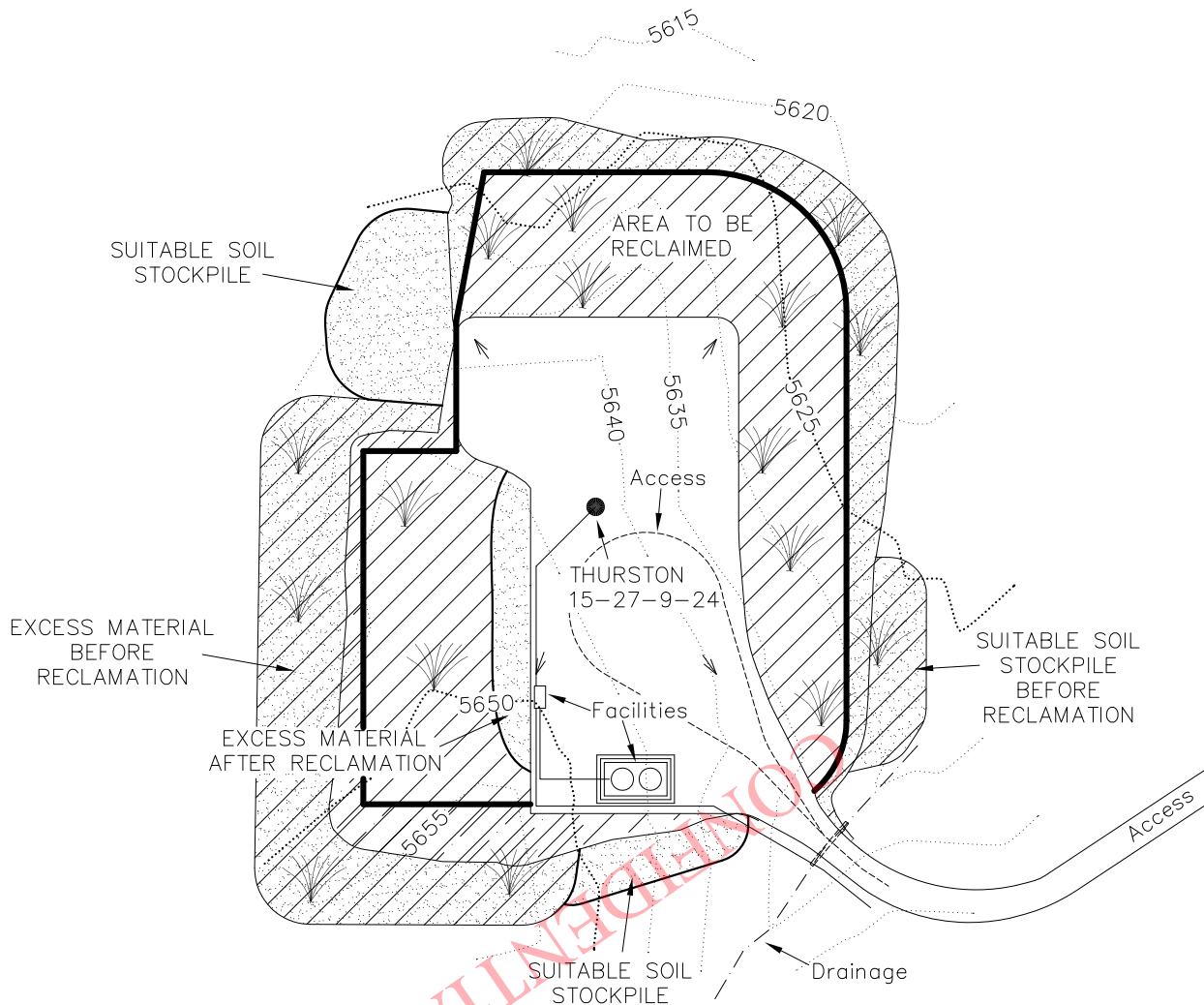
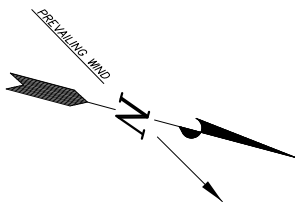


Section 27, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SE	Footage Location: 683' FSL & 1797' FEL
Date Surveyed: 10-19-05	Date Drawn: 11-2-05	Date Last Revision: 08-16-10 M.W.W.	Timberline (435) 789-1365
Surveyed By: K.R.K.	Drawn By: J.R.S.	Scale: 1" = 50'	<i>Land Surveying, Inc.</i> 209 NORTH 300 WEST VERNAL, UTAH 84078
			SHEET 6 OF 11

THURSTON ENERGY OPERATING COMPANY

INTERIM RECLAMATION DIAGRAM

THURSTON 15-27-9-24



NOTE:

1. PRODUCTION EQUIPMENT LOCATION
COULD VARY DUE TO SITE AND OPERATION
EFFECTIVENESS.

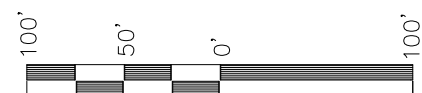
2. TOTAL DISTURBED AREA: ± 2.96 ACRES
RECLAIMED AREA: ± 1.84 ACRES
UN-RECLAIMED AREA: ± 1.12 ACRES

CONTOUR INTERVAL = 5'

↘ = Anchor



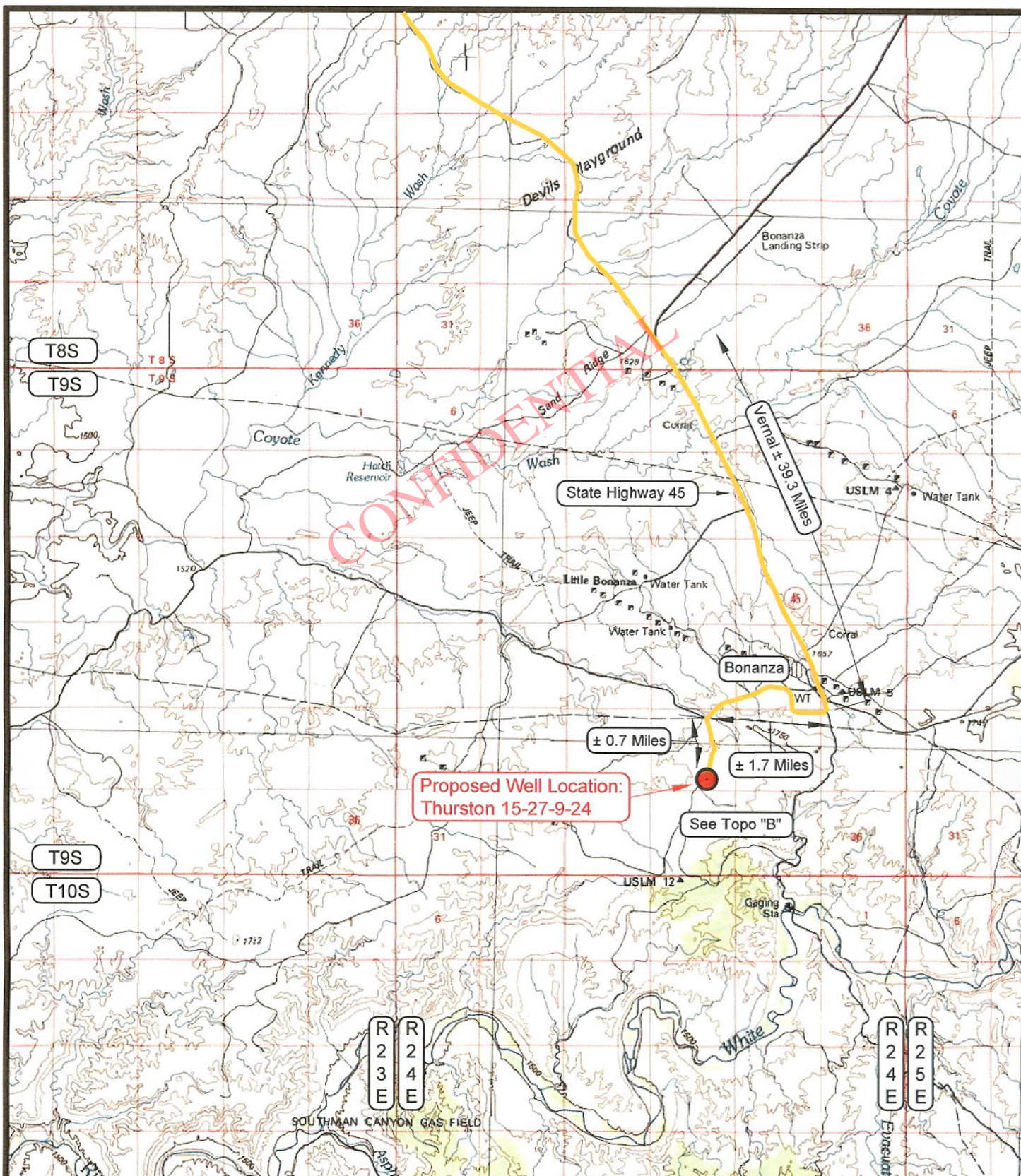
= Area to be Reclaimed
and Vegetated



S C A L E

Section 27, T9S, R24E, S.L.B.&M.		Qtr/Qtr Location: SW SE	Footage Location: 683' FSL & 1797' FEL
Date Surveyed: 10-19-05	Date Drawn: 08-16-10	Date Last Revision:	Timberline (435) 789-1365
Surveyed By: K.R.K.	Drawn By: M.W.W.	Scale: 1" = 100'	<i>Land Surveying, Inc.</i> 209 NORTH 300 WEST VERNAL, UTAH 84078
			SHEET 7 OF 11

APWELLINO:43047513280000



LEGEND

- = PROPOSED WELL LOCATION
- = EXISTING ROAD
- = EXISTING ROAD (TO BE IMPROVED)
- - - = PROPOSED ACCESS ROAD
- B-5460 = COUNTY ROAD CLASS & NUMBER

TOPOGRAPHIC MAP "A"

SCALE: 1:100,000

DRAWN BY: M.W.W.

DATE SURVEYED: 10-19-05

DATE DRAWN: 11-02-05

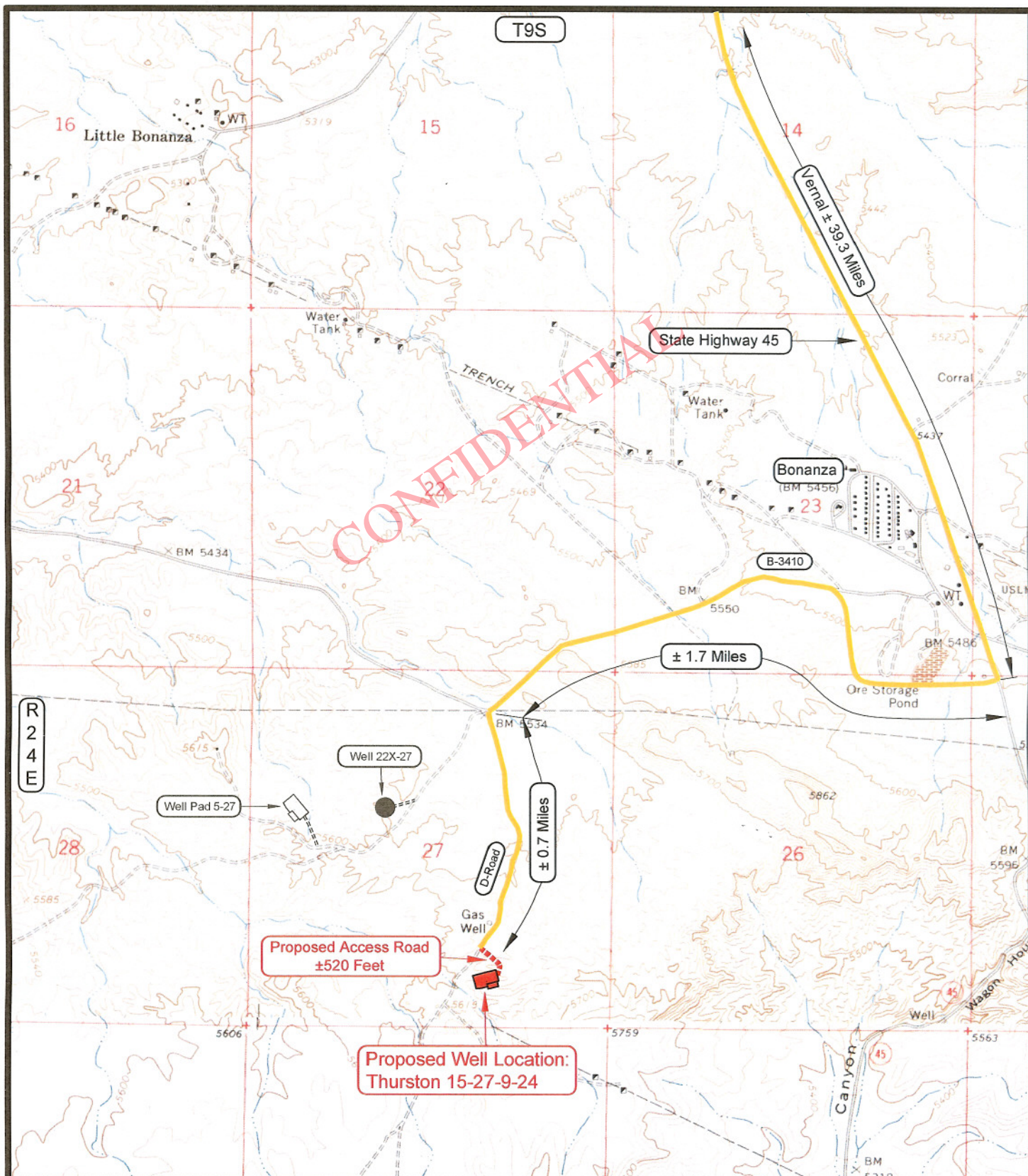
REVISED: 08-16-10 M.W.W.

THURSTON ENERGY OPERATING COMPANY

Thurston 15-27-9-24
SECTION 27, T9S, R24E, S.L.B.&M.
683' FSL & 1797' FEL

Timberline Land Surveying, Inc.
 209 North 300 West Vernal, Utah 84078
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SHEET
8
OF 11



LEGEND

- PROPOSED ACCESS ROAD
- ===== = SUBJECT WELL
- ===== = SHARED ACCESS
- ===== = EXISTING ROAD
- ===== = EXISTING ROAD (TO BE IMPROVED)
- (B-5460) = COUNTY ROAD CLASS & NUMBER
- ===== = LEASE LINE AND / OR PROPERTY LINE

TOPOGRAPHIC MAP "B"

SCALE: 1" = 2000'

DRAWN BY: M.W.W.

DATE SURVEYED: 10-19-05

DATE DRAWN: 11-02-05

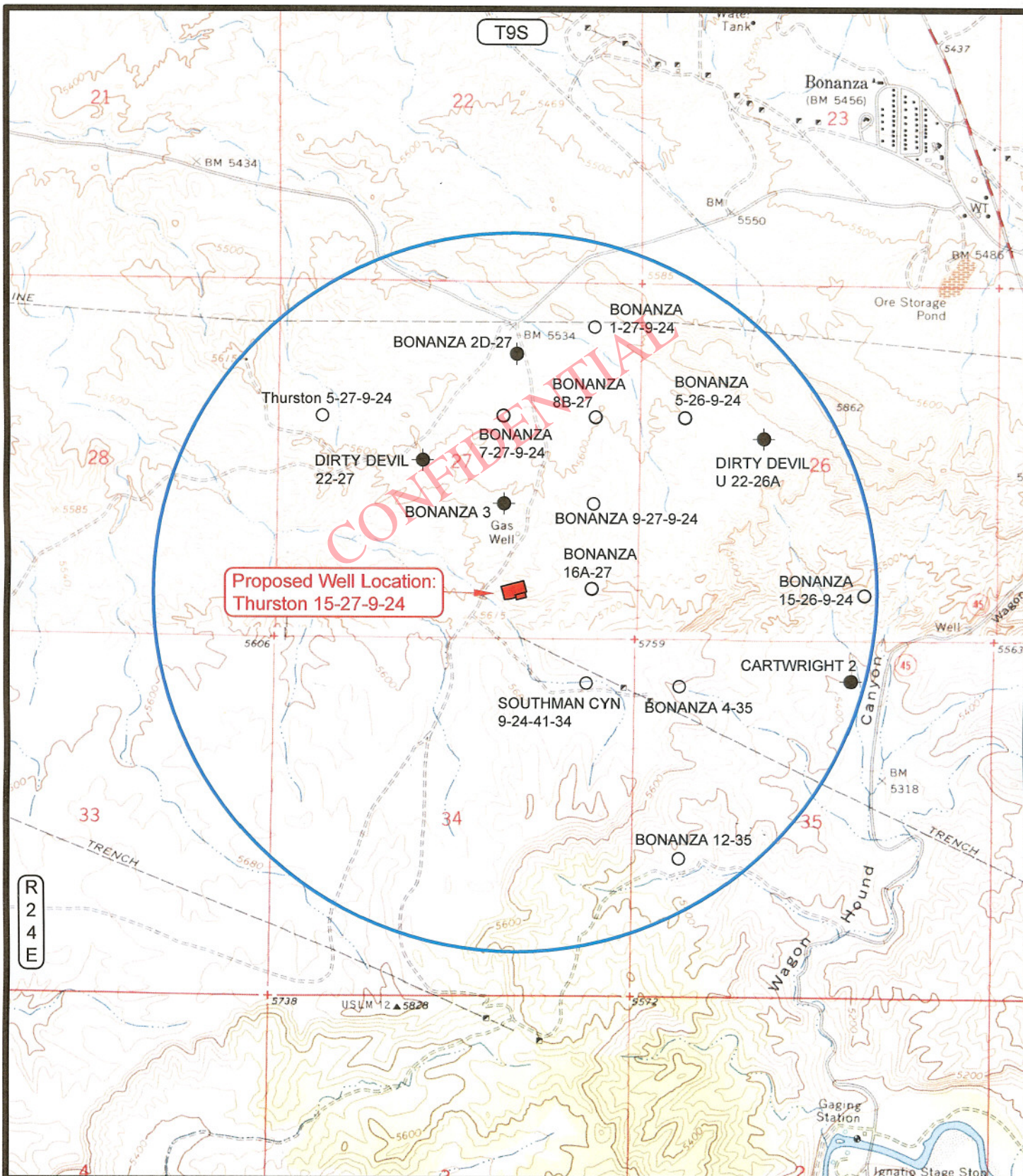
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THURSTON ENERGY OPERATING COMPANY

Thurston 15-27-9-24
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683' FSL & 1797' FEL

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SHEET
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OF 11



LEGEND

- ⊘ = DISPOSAL WELL
- = PRODUCING WELL
- = SHUT IN WELL
- = PROPOSED WELL
- ⊘ = WATER WELL
- = ABANDONED WELL
- = TEMPORARILY ABANDONED WELL
- ⊕ = ABANDONED LOCATION

TOPOGRAPHIC MAP "C"

SCALE: 1" = 2000'

DRAWN BY: M.W.W.

DATE SURVEYED: 10-19-05

DATE DRAWN: 11-02-05

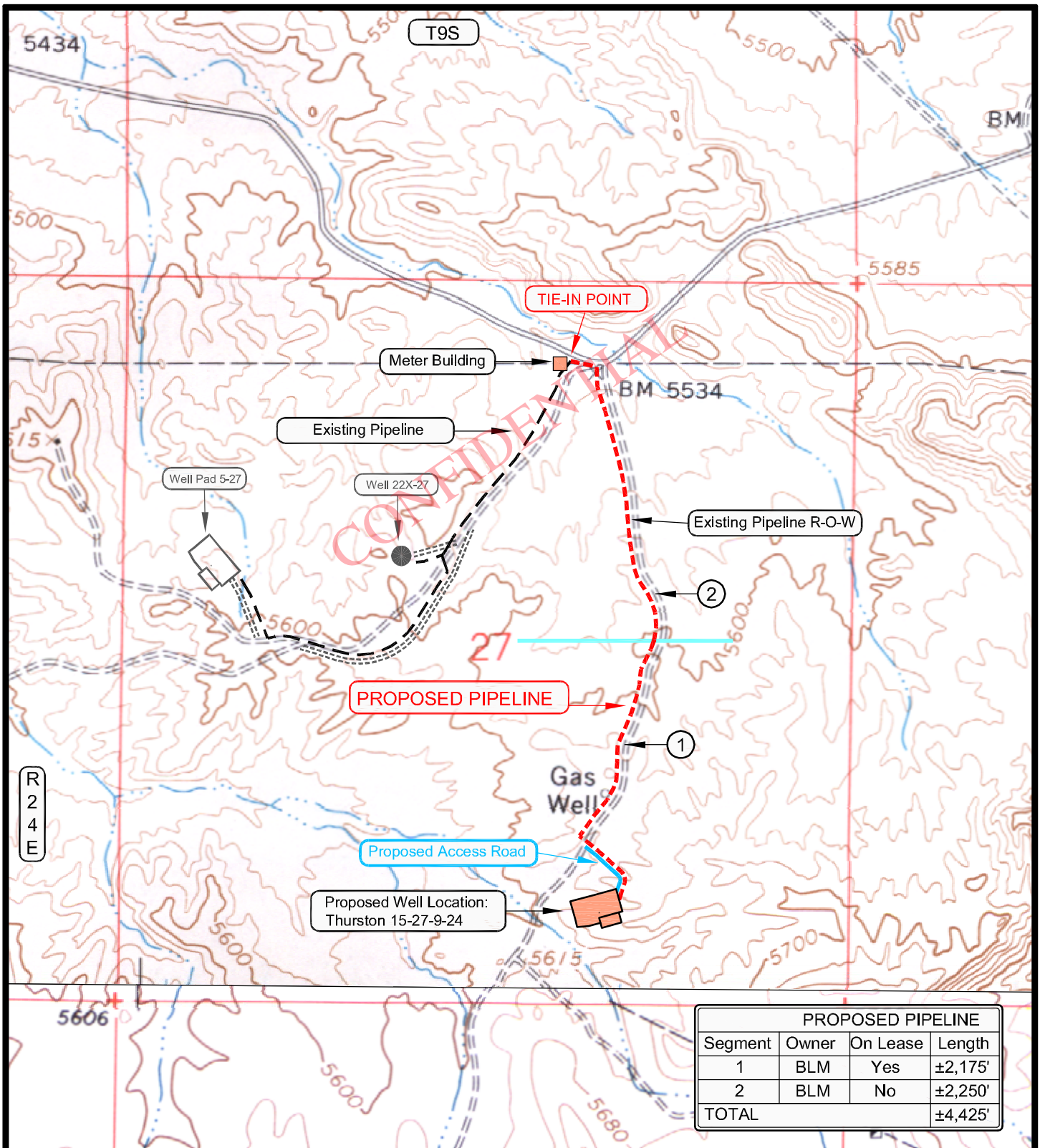
REVISED: 08-16-10 M.W.W.

THURSTON ENERGY OPERATING COMPANY

Thurston 15-27-9-24
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683' FSL & 1797' FEL

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SHEET
10
OF 11



APPROXIMATE PIPELINE LENGTH = ± 4,425 Feet

LEGEND

- = OTHER PIPELINE
- - - - - = PROPOSED PIPELINE
- = PROPOSED ACCESS ROAD
- = LEASE LINE AND / OR PROPERTY LINE

TOPOGRAPHIC MAP "D"

SCALE: 1" = 1000'

DRAWN BY: M.W.W.

DATE SURVEYED: 10-19-05

DATE DRAWN: 11-02-05

REVISED: 08-17-10 M.W.W.

THURSTON ENERGY OPERATING COMPANY

Thurston 15-27-9-24
SECTION 27, T9S, R24E, S.L.B.&M.
683' FSL & 1797' FEL

Timberline Land Surveying, Inc.

209 North 300 West Vernal, Utah 84078
 (435) 789-1365

SHEET

11

OF 11

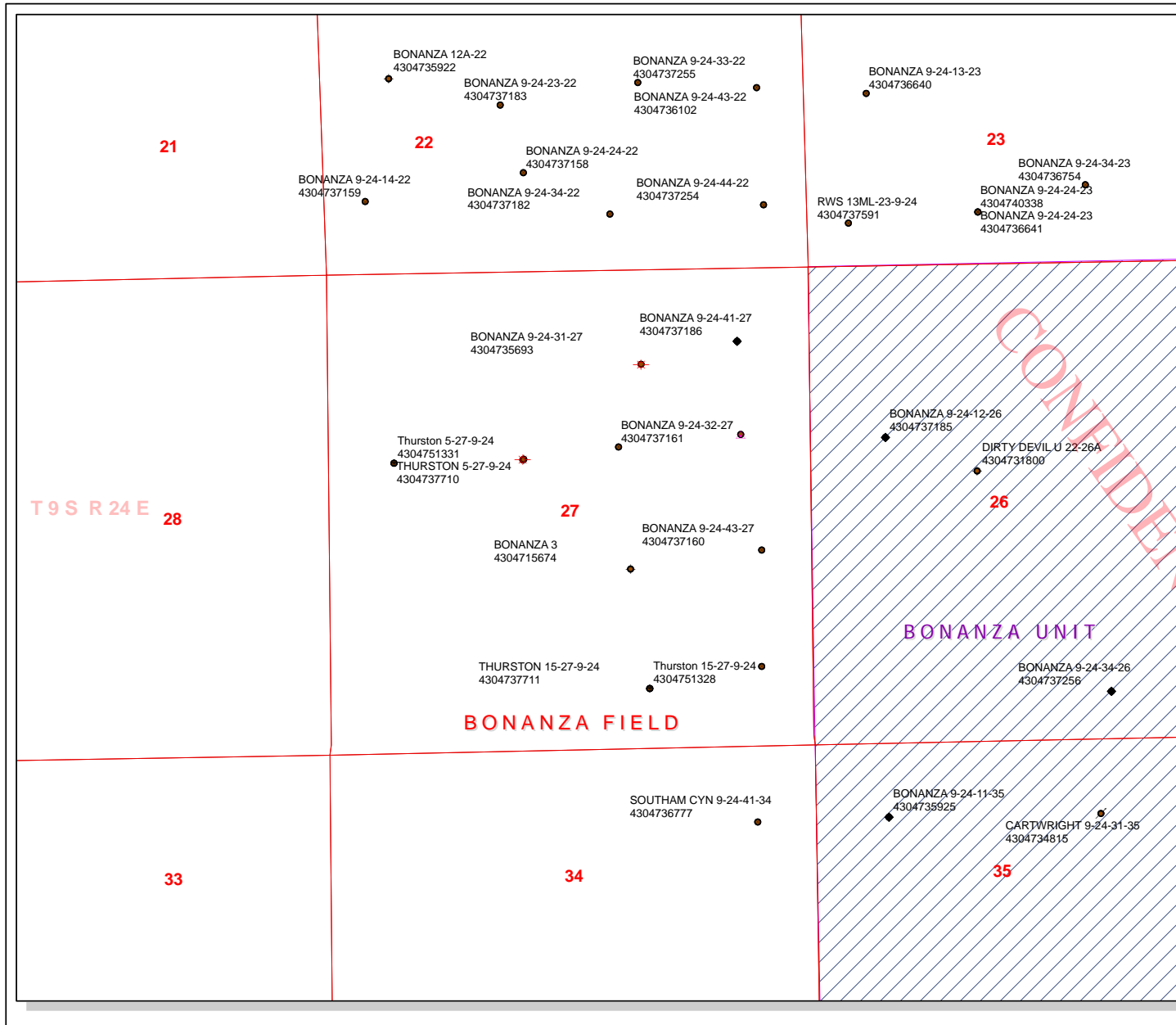
THURSTON ENERGY OPERATING COMPANY

Thurston 15-27-9-24

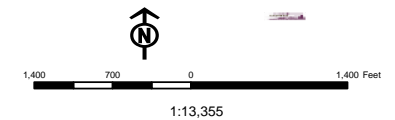
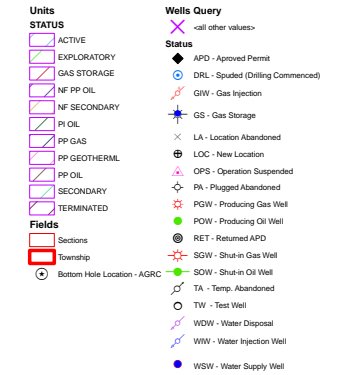
Section 27, T9S, R24E, S.L.B.&M.

FROM THE INTERSECTION OF U.S. HIGHWAY 40 AND 500 EAST STREET IN VERNAL, UTAH; PROCEED IN AN EASTERLY THEN SOUTHERLY DIRECTION ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.3 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 45 APPROXIMATELY 36 MILES TO THE JUNCTION OF COUNTY B ROAD 3410 (THIS ROAD IS LOCATED APPROXIMATELY 0.5 MILES SOUTH OF BONANZA, UTAH). EXIT RIGHT AND PROCEED IN A WESTERLY DIRECTION ALONG COUNTY B ROAD 3410 APPROXIMATELY 1.7 MILES TO THE JUNCTION OF A COUNTY D ROAD. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG THE COUNTY D ROAD APPROXIMATELY 0.7 MILES TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 520 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 41.8 MILES.



API Number: 4304751328
Well Name: Thurston 15-27-9-24
Township 09.0 S Range 24.0 E Section 27
Meridian: SLBM
Operator: THURSTON ENERGY OPERATING
 Map Prepared:
 Map Produced by Diana Mason



WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/22/2010

API NO. ASSIGNED: 43047513280000

WELL NAME: Thurston 15-27-9-24

OPERATOR: THURSTON ENERGY OPERATING (N2790)

PHONE NUMBER: 435 789-8580

CONTACT: Russell H. Cox

PROPOSED LOCATION: SWSE 27 090S 240E

Permit Tech Review: ☒

SURFACE: 0683 FSL 1797 FEL

Engineering Review: ☐

BOTTOM: 0683 FSL 1797 FEL

Geology Review: ☒

COUNTY: Uintah

LATITUDE: 40.00150

LONGITUDE: -109.19645

UTM SURF EASTINGS: 653956.00

NORTHINGS: 4429272.00

FIELD NAME: BONANZA

LEASE TYPE: 1 - Federal

LEASE NUMBER: SL-0717250 C

PROPOSED PRODUCING FORMATION(S): WASATCH-MESA VERDE

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

☒ **PLAT**

☒ **Bond:** FEDERAL - UTB-000181

☐ **Potash**

☐ **Oil Shale 190-5**

☐ **Oil Shale 190-3**

☐ **Oil Shale 190-13**

☒ **Water Permit:** White River Permit #49-2286

☐ **RDCC Review:**

☐ **Fee Surface Agreement**

☐ **Intent to Commingle**

Commingle Approved

LOCATION AND SITING:

☐ **R649-2-3.**

Unit:

☐ **R649-3-2. General**

☐ **R649-3-3. Exception**

☒ **Drilling Unit**

Board Cause No: Cause 179-15

Effective Date: 7/17/2008

Siting: 460' Fr Exterior Lease Boundary

☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Thurston 15-27-9-24

API Well Number: 43047513280000

Lease Number: SL-0717250 C

Surface Owner: FEDERAL

Approval Date: 11/1/2010

Issued to:

THURSTON ENERGY OPERATING, 365 W. 50 N. Ste W-8, Vernal, UT 84078

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 179-15. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month

- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

A handwritten signature in black ink, appearing to read "J. Rogers", written over a horizontal line.

For John Rogers
Associate Director, Oil & Gas

RECEIVED

JUN 15 2011

OCT 20 2010

Form 3160-3
(August 2007)

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

BLM VERNAL, UTAH


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SL-071725 C
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Thurston Energy Operating Company		7. If Unit or CA Agreement, Name and No.
3a. Address 365 West 50 North Suite W-8 Vernal, Ut 84078	3b. Phone No. (include area code) 435-789-8580	8. Lease Name and Well No. Thurston 15-27-9-24
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 683' FSL & 1,797' FEL SWSE At proposed prod. zone same as above		9. API Well No. 43-047-51328
14. Distance in miles and direction from nearest town or post office* 41.8 miles south of Vernal, UT		10. Field and Pool, or Exploratory Undesignated
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 683'	16. No. of acres in lease 400	11. Sec., T. R. M. or Blk. and Survey or Area Sec. 27, T9S, R24E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,100'	19. Proposed Depth 8,000	12. County or Parish Uintah
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5,638' GR	22. Approximate date work will start* 03/11/2011	13. State UT
17. Spacing Unit dedicated to this well 40		
20. BLM/BIA Bond No. on file UTB-000181		
23. Estimated duration 30 days		

24. Attachments

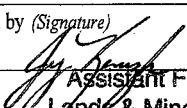
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed/Typed) William A. Ryan	Date 10/13/2010
---	---	--------------------

Title

Agent

Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date AUG 11 2011
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

RECEIVED

AUG 18 2011

DIV. OF OIL, GAS & MINING

NOTICE OF APPROVAL

UDOGM

105XSD0204A

NOS 3/18/2010



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	Thurston Energy Operating Company	Location:	SWSE, Sec. 27, T9S, R24E
Well No:	Thurston 15-27-9-24	Lease No:	UTSL-071725C
API No:	43-047-51328	Agreement:	N/A

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov .
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)***

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- Construction and drilling activities are not allowed from January 1 – August 31 to minimize impacts during golden eagle nesting. This timing limitation only applies to Section 19, T9S, and R24E.
- If it is anticipated that construction and drilling activities will occur during any of the given timing restrictions, a BLM or qualified biologist shall be notified so surveys can be conducted. Depending upon the results of the surveys, permission to proceed may or may not be granted by the Authorized Officer.
- See mitigation / applicant committed design features in EA-0317 for more specifics on conditions of approval for potential air quality impacts
- All production tanks except on the 7-9-9-24 location will be placed towards the front of the well pad to maximize interim reclamation, and lessen the potential long term impacts that could occur to soils and vegetation.
- Topsoil shall be wrapped around corner #10 for the 5-27-9-24 location as discussed on the onsite 6/30/2010.
- All access roads shall be built to BLM standards. The crown and ditch method is the standard which helps control runoff from increasing potential erosion rates to the road surfaces. This will also help divert any seasonal flows off the road into vegetated areas to increase the chance for reclamation success on road disturbance areas that should be reseeded after construction has ceased, preferably in the fall before ground freeze.
- All production equipment will be painted Covert Green to help blend in with surrounding vegetation.
- On all locations a permanent reference point must be established prior to any reclamation activities. This reference point helps to establish the criteria for successful reclamation based on the Green River District Reclamation Guidelines.
- A dike/berm will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater-treater). It will be constructed of

compacted subsoil, be impervious, hold 110% of the capacity of the largest tank, and be independent of the back cut.

- The reserve pit will be fenced on three sides during drilling operations and on the fourth side when the rig moves off location. It will be fenced, and the fence maintained, until the pit undergoes reclamation efforts.
- To insure impermeability, the reserve pit will be lined with a 16 ml or greater liner and felt prior to spudding.
- Reserve pits will be closed as soon as possible, but no later than 180 days from time of drilling/well completion, unless the BLM Authorized Officer gives an extension. Pits must be dry of fluids or they must be removed via vac-truck or other environmentally acceptable method prior to backfilling, re-contouring and replacement of topsoil. Mud and cuttings left in pit must be buried at least 3-feet below re-contoured grade. The operator will be responsible for re-contouring any subsidence areas that develop.
- Any hydrocarbons in the reserve pit will be removed immediately upon well completion; in accordance with 43 CFR 3162.7-1. Pits must be free of oil and other liquid and solid wastes prior to filling.
- The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear. The existing access road surface and pad area will be kept free of trash during all operations. All traffic will be confined to the approved disturbed surface area.
- The operator will control noxious weeds and invasive plants along corridors for roads, pipelines, well sites, or other applicable facilities, through a Pesticide Use Permit (PUP).
- An Interim Surface Reclamation Plan for surface disturbance on the well pad, access road, and pipeline has been completed and will be followed for reclamation of the surface. At a minimum, this will include the Best Management Practice of the reshaping of the pad to the original contour to the extent possible; the re-spreading of the top soil up to the rig anchor points; and, reseeding the unused area using appropriate reclamation methods (Thurston's reclamation plan).

The interim/final seed mix for reclamation will be:

Table 2.3.5 Interim/Final Reclamation Seed Mixture

Common name	Latin name	lbs/acre	Recommended seed planting depth
Squirreltail grass	<i>Elymus elymoides</i>	3.0	¼ - ½"
Siberian Wheatgrass	<i>Agropyron fragile</i>	2.0	½"
Needle and Thread	<i>Stipa comata</i>	3.0	½"
Bluebunch Wheatgrass	<i>Pseudoroegneria spicata</i>	3.0	½"
Shadscale	<i>Atriplex confertifolia</i>	0.50	½"
Gardner's saltbush	<i>Atriplex gardneri</i>	0.50	½"
Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.10	⅛ - ¼"

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
- Rates are set for drill seeding; double rate if broadcasting.

- Following well plugging and abandonment, the location, access roads, pipelines, and other facilities shall be fully reclaimed. All disturbed surfaces shall be reshaped to approximate the original contour; the top soil re-spread over the surface; and, the surface re-vegetated. The surface of approved staging areas where construction activities did not occur may require disking or ripping and reseeding. In order the Final Abandonment Notice to be approved Thurston must meet the requirement for successful reclamation as outlined in the Green River District Reclamation Guidelines.

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE COAs:

- Gamma Ray Log shall be run from Total Depth to Surface.
- Cement for the production casing must be brought 200 feet above the surface casing shoe.

Variances Granted

Air Drilling:

- Properly lubricated and maintained rotating head. Variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head.
- Blooie line discharge 100 feet from the well bore. Variance granted for blooie line discharge to be 45 feet from the well bore.
- Compressors located in the opposite direction from the blooie line, a minimum of 100 feet from the well bore. Variance granted for truck/trailer mounted air compressors located within 45 feet of the well.
- In lieu of mud products on location for a "kill medium", water will be pulled from the reserve pit and used as a kill fluid.
- Automatic igniter. Variance granted due to lack of productive formations in the interval for the surface sassing.
- FIT test. Variance granted due to well-known geology and problems that can occur with the FIT test.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order

No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.